

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-21. (Canceled)

22. (Currently Amended) A display device, comprising:

a plurality of scan lines;

a plurality of data lines;

a display matrix comprising a plurality of pixels ~~at the~~ corresponding to intersections of the plurality of scan lines and the plurality of data lines;

a first data line driving circuit; and

a second data line driving circuit,

the first data line driving circuit being connectable to at least one of the plurality of data lines ~~through one end of the at least one of the data lines,~~

the first data line driving circuit being a line sequential driver,

the second data line driving circuit being connectable to the at least one of the plurality of data lines ~~through the other end of the at least one of plurality of the data lines,~~ and

the second data line driving circuit having a plurality of switches, the plurality of switches being connected to one of the plurality of data lines and being turned on in response to a single pulse sequentially.

~~the line sequential driver outputting a plurality of simultaneous pulses to connected data lines.~~

23. (Previously Presented) The display device according to claim 22, the first data line driving circuit including at least one element that is not included in the second data line driving circuit.

24. (Previously Presented) The display device according to claim 22,
the first data line driving circuit and the second data line driving circuit having
mutually different functions.

25. (Previously Presented) The display device according to claim 22,
at least one of the plurality of scan lines connectable to a first scan line driving
circuit and a second scan line driving circuit.

26. (Previously Presented) The display device according to claim 22,
at least one of the plurality of scan lines connectable to a first scan line driving
circuit, and at least one of the plurality of scan lines connectable to a second scan line driving
circuit.

27. (Currently Amended) A display substrate for use with a first data line driving
circuit and a second data line driving circuit, comprising:

a plurality of scan lines; and

a plurality of data lines;

~~at least one same data line of the plurality of data lines connectable to
both of the first data line driving circuit and the second data line driving circuit,~~

the first data line driving circuit being a line sequential driver,

the second data line driving circuit having a shift register and a
plurality of switches, each being switch connected to the other end of one of the plurality of
data lines and the shift register generating a plurality of single pulses sequentially, being
turned on in response to a single pulse sequentially.

~~the line sequential driver outputting a plurality of simultaneous pulses to
connected data lines.~~

28. (Currently Amended) A display substrate for use with a first data line driving
circuit and a second data line driving circuit, comprising:

a plurality of scan lines; and

a plurality of data lines;

the plurality of data lines connectable to ~~both of the first data line~~
driving circuit and the second data line driving circuit,

the first data line driving circuit being a line sequential driver,

the second data line driving circuit having ~~a shift register and a~~
plurality of switches, each switch connected to ~~the other end of~~ one of the plurality of data
lines and ~~the shift register generating a plurality of single pulses sequentially, each of the~~
~~plurality of switches being turned on in response to a single pulse sequentially.~~

~~the line sequential driver outputting a plurality of simultaneous pulses to~~
~~connected data lines.~~

29. (Previously Presented) The display substrate according to claim 27, further
comprising:

a first scan line driving circuit; and

a second scan line driving circuit,

the plurality of scan lines being disposed between the first scan line driving
circuit and the second scan line driving circuit.

30. (Previously Presented) The display device according to claim 22,
at least one of the first data line driving circuit and the second data line driving
circuit having a function of outputting a digital data signal.

31. (Previously Presented) The display device according to claim 22,
one of the first data line driving circuit and the second data line driving circuit
having a function of outputting an analog data signal, and the other of the first data line
driving circuit and the second data line driving circuit having a function of outputting a digital
data signal.

32. (Previously Presented) The display device according to claim 22,
at least one of the first data line driving circuit and the second data line driving
circuit having a function of outputting an analog data signal.

33. (Previously Presented) The display substrate according to claim 28, further
comprising:

a first scan line driving circuit; and
a second scan line driving circuit,
the plurality of scan lines being disposed between the first scan line driving
circuit and the second scan line driving circuit.

34. (Previously Presented) The display device according to claim 22,
the first data line driving circuit having a first latch that takes a digital signal in
and stores the digital signal, a second latch that takes the digital signal outputted from the first
latch in and stores the digital signal, and a D / A converter that converts the digital signal
supplied from the second latch into an analog signal and drives the at least one of the plurality
of data lines.

35. (Previously Presented) The display device according to claim 34,
the first latch, the second latch, the D / A converter, and the display matrix
being formed on a substrate.

36. (New) A display device, comprising:
a plurality of scan lines;
a plurality of data lines;
a display matrix comprising a plurality of pixels corresponding to intersections
of the plurality of scan lines and the plurality of data lines;
a first data line driving circuit; and
a second data line driving circuit;

the first line driving circuit being connectable to at least one of the plurality of data lines through one end of at least one of the data lines;

the first data line driving circuit being a line sequential driver;

the second data line driving circuit being connectable to at least one of the plurality of data lines through the other end of at least one of plurality of the data lines, and

at least one of the plurality of data lines being connectable to both of the first data line driving circuit and the second data line driving circuit;

the second data line driving circuit having a plurality of switches, the plurality of switches being connected to one of the plurality of data lines and being turned on sequentially.

37. (New) A display device, comprising:

a plurality of scan lines;

a plurality of data lines;

a display matrix comprising a plurality of pixels corresponding to intersections of the plurality of scan lines and the plurality of data lines; and

a first data line driving circuit; and

a second data line driving circuit;

the first line driving circuit being connectable to at least one of the plurality of data lines through one end of at least one of the data lines;

the first data line driving circuit being a line sequential driver;

the second data line driving circuit being connectable to at least one of the plurality of data lines; and

the second data line driving circuit having a plurality of switches and a shift register generating a plurality of signals, each of the plurality of switches being

connected to one of the plurality of data lines and being turned on according to the plurality of signals.

38. (New) A display device, comprising:

a plurality of scan lines;

a plurality of data lines;

a display matrix comprising a plurality of pixels corresponding to intersections of the plurality of scan lines and the plurality of data lines;

a first data line driving circuit; and

a second data line driving circuit;

the first line driving circuit being connectable to at least one of the plurality of data lines through one end of at least one of the data lines; and

the first data line driving circuit being a line sequential driver;

the second data line driving circuit being connectable to at least one of the plurality of data lines through the other end of at least one of the plurality of the data lines; and

at least one of the plurality of data lines being connectable to both of the first data line driving circuit and the second data line driving circuit;

the second data line driving circuit having a plurality of switches and a shift register generating a plurality of signals, each of the plurality of switches being connected to one of the plurality of data lines and being turned on according to the plurality of signals.

39. (New) A display substrate for use with a first data line driving circuit and a second data line driving circuit, comprising:

a plurality of scan lines; and

a plurality of data lines;

at least one data line of the plurality of data lines being connectable to both of the first data line driving circuit and the second data line driving circuit;

the first data line driving circuit being a line sequential driver;

at least one of the plurality of data lines being connectable to both of the first data line driving circuit and the second data line driving circuit;

the second data line driving circuit having a shift register and a plurality of switches, the shift register generating a plurality of single pulses sequentially, each switch being connected to the other end of one of the plurality of data lines being turned on sequentially.

40. (New) A display substrate for use with a first data line driving circuit and a second data line driving circuit, comprising:

a plurality of scan lines; and

a plurality of data lines;

the first data line driving circuit being a line sequential driver;

the second data line driving circuit having a plurality of switches, each switch being connected to one of the plurality of data lines and being turned on according to the plurality of signals.

41. (New) A display substrate for use with a first data line driving circuit and a second data line driving circuit, comprising:

a plurality of scan lines; and

a plurality of data lines;

at least one data line of the plurality of data lines being connectable to both of the first data line driving circuit and the second data line driving circuit;

the first data line driving circuit being a line sequential driver;

at least one of the plurality of data lines being connectable to both of the first data line driving circuit and the second data line driving circuit;

the second data line driving circuit having a shift register and a plurality of switches, the shift register generating a plurality of signals, each switch being connected to the other end of one of the plurality of data lines and being turned on according to the plurality of the signals.

42. (New) A display substrate for use with a first data line driving circuit and a second data line driving circuit, comprising:

a plurality of scan lines; and

a plurality of data lines;

the plurality of data lines being connectable to both of the first data line driving circuit and the second data line driving circuit;

the first data line driving circuit being a line sequential driver;

the second data line driving circuit having a shift register and a plurality of switches, the shift register generating a plurality of single pulses sequentially, each switch being connected to one of the plurality of data lines and being turned on according to the plurality of signals.

43. (New) A display substrate for use with a first data line driving circuit and a second data line driving circuit, comprising:

a plurality of scan lines; and

a plurality of data lines;

the plurality of data lines being connectable to the first data line driving circuit and the second data line driving circuit;

the first data line driving circuit being a line sequential driver;

the second data line driving circuit having a plurality of switches, each switch being connected to one of the plurality of data lines being turned on according to the plurality of signals.

44. (New) A display substrate for use with a first data line driving circuit and a second data line driving circuit, comprising:

a plurality of scan lines; and

a plurality of data lines;

the plurality of data lines connectable to both of the first data line driving circuit and the second data line driving circuit;

the first data line driving circuit being a line sequential driver;

the second data line driving circuit having a shift register and a plurality of switches, the shift register generating a plurality signals, each switch being connected to the other end of one of the plurality of data lines being turned on according to the plurality of the signals.